In The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-3 (canceled).

Claim 4 (currently amended) ~~The invention of Claim 3~~ A signal processing system comprising:

means for receiving an incoming radio frequency signal;

means for narrowing the received incoming signal to a limited frequency band;

means for amplifying the narrowed incoming signal;

means for rejecting an image of the narrowed incoming signal to output an input signal;

means for distributing the input signal to one of two or more channels;

means disposed in each of said channels for processing the distributed signal and providing an output signal in response thereto, wherein only one of said processing means is active at a time; and

means for combining the signals output by two or more said processing means,

wherein said mixing circuit further includes means for providing automatic gain control for each of said channels.

Claim 5 (original) The invention of Claim 4 wherein said means for providing automatic gain control operates in a current mode.

Claim 6 (previously presented) The invention of Claim 4 wherein said means for providing automatic gain control includes a digital automatic gain control circuit.

Claim 7 (currently amended) ~~The invention of Claim 3~~ A signal processing system comprising:

means for receiving an incoming radio frequency signal;

means for narrowing the received incoming signal to a limited frequency band;

means for amplifying the narrowed incoming signal;

means for rejecting an image of the narrowed incoming signal to output an input signal;

means for distributing the input signal to one of two or more channels;

means disposed in each of said channels for processing the distributed signal and providing an output signal in response thereto, wherein only one of said processing means is active at a time; and

means for combining the signals output by two or more said processing means,

wherein said distribution means includes a mixing circuit, and

wherein said mixing circuit further includes means for selectively providing differential digital automatic gain control signals in response to a channel select signal.

Claims 8-10 (canceled)

Claim 11 (currently amended) ~~The invention of Claim 3~~ A signal processing system comprising:

means for receiving an incoming radio frequency signal;

means for narrowing the received incoming signal to a limited frequency band;

means for amplifying the narrowed incoming signal;

means for rejecting an image of the narrowed incoming signal to output an input signal;

means for distributing the input signal to one of two or more channels;

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means disposed in each of said channels for processing the distributed signal and providing an output signal in response thereto, wherein only one of said processing means is active at a time; and

means for combining the signals output by two or more said processing means,

wherein said distribution means includes a mixing circuit, and

wherein said mixing circuit includes at least one Gilbert cell.

Claim 12 (currently amended) ~~The invention of Claim 3~~ A signal processing system comprising:

means for receiving an incoming radio frequency signal;

means for narrowing the received incoming signal to a limited frequency band;

means for amplifying the narrowed incoming signal;

means for rejecting an image of the narrowed incoming signal to output an input signal;

means for distributing the input signal to one of two or more channels;

means disposed in each of said channels for processing the distributed signal and providing an output signal in response thereto, wherein only one of said processing means is active at a time; and

means for combining the signals output by two or more said processing means,

wherein said distribution means includes a mixing circuit, and

wherein said mixing circuit includes a transconductance amplifier.

Claim 13 (original) The invention of Claim 12 wherein said mixing circuit includes an automatic gain control circuit.

Claim 14 (canceled).

Claim 15 (previously presented) A receiver comprising:

a radio frequency stage for downconverting a received signal and providing said input signal in response thereto;

a distributor for distributing said input signal to one of two or more channels, said distributor including a mixing circuit having:

a Gilbert cell for each channel,

an automatic gain control circuit for each channel in communication with a respective one of said Gilbert cells, and

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a transconductance amplifier in communication with said automatic gain control circuits;

a filter disposed in each of said channel for processing said distributed signals and outputting the processed signals; and

a combining circuit for combining the signals output by said processing means.

Claim 16 (canceled)

Claim 17 (currently amended) A signal processing circuit comprising:

a receiver for receiving an incoming signal;

a pre select filter connected to the receiver for filtering the received incoming signal;

a low noise amplifier connected to the pre select filter for amplifying the filtered incoming signal;

~~a image~~ an image rejection filter connected to the low noise amplifier for rejecting predetermined images of the amplified incoming signal to thereby output an incoming signal;

a distributor connected to the image rejection filter for distributing the input signal to one of at least two channels in a current mode of operation;

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an intermediate-frequency filter disposed in each of said two channels for processing said input signal and providing an output signal in response thereto, wherein only one of said intermediate-frequency filters is active at a time; and

a ~~mixer~~ demultiplexer connected to the outputs of each intermediate-frequency filter for combining the signals output by each of said intermediate-frequency filter.

Claim 18 (previously presented) A receiver comprising:

a radio frequency stage for downconverting a received signal and providing said input signal in response thereto;

a distributor for distributing said input signal to one of at least two channels in a current mode of operation, said distributor including a mixing circuit having:

a Gilbert cell for each channel,

an automatic gain control circuit for each channel operatively coupled with a respective one of said Gilbert cells, and

a transconductance amplifier operatively coupled with said automatic gain control circuits; and

a filters disposed in each of said channels for processing said input signal and providing an output signal in response thereto.

Claim 19 (new) 1. A signal processing system comprising:

a radio frequency converter for downconverting a received signal and providing an input signal in response thereto;

a multiplexing circuit for selectably distributing said input signal between two or more channels, said multiplexing circuit includes a global automatic gain control circuit for performing automatic gain control on said input signal before it is distributed to said two or more channels, wherein each of said channels include intermediate frequency filters having different signal pass characteristics, each of said channels providing an output signal in response to the distributed input signal;

a demultiplexing circuit for combining the output signals from said two ore more channels; and

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a control circuit operatively coupled to said multiplexing circuit and said demultiplexing circuit for controlling the signal processing system.

Claim 20 (new) The signal processing system of claim 19, wherein each of said channels includes a Gilbert cell.

Claim 21 (new) The signal processing system of claim 19, further comprising a transconductance amplifier operatively coupled to said global automatic gain control circuit.